

**IOWA DEPARTMENT OF NATURAL RESOURCES
ADMINISTRATIVE ORDER**

IN THE MATTER OF: City of Fort Dodge Public Water Supply Facility No. 9433050	ADMINISTRATIVE ORDER NO. 2012-WS- 06
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TO: City of Fort Dodge
Mayor and Council Members
819 1st Avenue South
Fort Dodge, IA 50501-4739

I. SUMMARY

This administrative order (Order) is issued to the City of Fort Dodge (City). This Order is issued due to the City's failure to meet the conditions of its water supply operation permit. This Order requires the City to:

1. Complete construction of the project to provide a backup power supply for wells to meet current average daily demand by September 30, 2013.
2. Complete construction of an operational emergency backup power source for the John W. Pray Water Treatment Plant, including the ground storage tank at the water treatment plant and the booster pump serving the tower west of the water treatment plant, to meet current average daily demand by September 30, 2013.
3. Pay an administrative penalty of \$10,000.00.

Any questions regarding this Order should be directed to:

Relating to technical requirements:

Jennifer Bunton, P.E.
Senior Environmental Engineer
Iowa Department of Natural Resources
401 SW 7th Street, Suite M
Des Moines, Iowa 50309-4611
(515) 725-0298

Relating to legal requirements:

Diana Hansen, Attorney at Law
Legal Services Bureau
Iowa Department of Natural Resources
502 East 9th Street
Des Moines, Iowa 50319-0034
(515) 281-6267

Direct payment of penalty to:

Iowa Department of Natural Resources
502 East 9th Street
Des Moines, Iowa 50319-0034

**IOWA DEPARTMENT OF NATURAL RESOURCES
ADMINISTRATIVE ORDER
CITY OF FORT DODGE**

II. JURISDICTION

This Order is issued pursuant to Iowa Code section 455B.175(1), which authorizes the Director to issue any order necessary to secure compliance with or prevent a violation of Iowa Code chapter 455B, Division III, Part 1, and the rules promulgated or permits issued pursuant thereto; and Iowa Code section 455B.109 and 567 Iowa Administrative Code (IAC) chapter 10 (455B), which authorize the Director to assess penalties.

III. STATEMENT OF FACTS

1. This public water supply system is located in northern Webster County, near the intersection of US Highways 20 and 169, approximately 90 miles north of the City of Des Moines. This system utilizes seven wells, induced draft and cascade aeration, pre-chlorination for oxidation, and rapid sand filtration for iron and manganese removal. There are two 250,000-gallon clear wells. Water is transferred from the clear wells to a 2 million gallon (MG) below grade reservoir. From there, pumps deliver water to the distribution system and four elevated storage tanks, two 2 MG and two 1.5 MG. Booster pumping stations are located at Country Club Tower and the Airport Tower to assist with pressures in the system. This water system produces an average of 5 MG per day and serves a population of approximately 26,309.
2. On February 3, 2003, the City's electrical engineering consultant, Gopal Krishna of Krishna Engineering Consultants, requested a variance to Recommended Standards for Water Works Standard 2.6. This request included a letter from Glenn Nobiling of MidAmerican Energy confirming that the water treatment plant could be fed from two different power sources.
3. On February 3, 2003 Jennifer (Simons) Bunton, Department of Natural Resources (Department) Environmental Engineer, sent a fax to Mr. Krishna indicating that based on the information submitted, the City was complying with the standard by virtue of a connection to two independent power sources. As a result, a variance was not required, but the Department still recommended an auxiliary power source.
4. On June 11, 2004 the Department's Water Supply Engineering Section issued a construction permit to the City. The construction permit was issued for work on the treatment plant using a Drinking Water State Revolving Fund (DWSRF) loan.
5. On May 14, 2007, the Department performed an inspection of the DWSRF project and understood from conversations with water production manager John Horrell that the water treatment plant could not run on the alternative power source. On June 27, 2007 the Department's engineer sent a letter to the City notifying the City of the deficiency in standby power. The Department requested a response within 45 days.
6. On July 10, 2007 Alan Peterson, McClure Engineering, sent an email to the Department's engineer stating that his firm was under contract with the City to prepare a comprehensive engineering report on the system, including the provision of emergency power. On August 30, 2007 the Department's engineer replied to the City and confirmed that McClure Engineering

**IOWA DEPARTMENT OF NATURAL RESOURCES
ADMINISTRATIVE ORDER
CITY OF FORT DODGE**

would be submitting a preliminary engineering report addressing emergency power by September 30, 2007.

7. On February 1, 2008 the Department's engineer sent an email note to consultant Mike Trotter, McClure Engineering, requesting an update on the status of the preliminary engineering report. Mr. Trotter indicated the report would be finished within one month.

8. On August 27, 2008, the Department received the preliminary engineering report from McClure Engineering. The preliminary engineering report addressed the provision of standby power for the system and indicated that "The existing water treatment plant has no standby power system. When the normal power service fails, the water plant ceases to operate."

9. On September 10, 2008, the Department's Water Supply Operations Section issued a revised water supply operation permit with an appendix. The permit appendix required backup power for wells nos. 14 and 17 and for the John W. Pray Water Treatment Plant, including the ground storage tank at the water treatment plant and the booster pump serving the tower west of the water treatment plant. The permit appendix required that this emergency power system be designed and bid by February 28, 2009, and constructed by March 31, 2010.

10. On April 21, 2009, the Department's engineer sent an email note to John Horrell at the City asking if the emergency power project for the treatment plant and booster station had been bid. Mr. Horrell indicated he did not know the status of the project and to contact the consulting engineer.

11. On June 2, 2009, the Water Supply Operations Section issued a notice of violation (NOV) letter for a compliance schedule violation. The NOV was issued for failure to design and bid emergency power for wells nos. 14 and 17 and the John W. Pray Water Treatment Plant by February 28, 2009, as required by the revised water supply operation permit.

12. On July 2, 2009, the City reported to the public in its Consumer Confidence Report (CCR) that "the City is currently obtaining bids and proposals for the design of emergency backup power and related elements." On August 6, 2009, Ed Slattery, Stanley Consultants, informed the Department's engineer in a telephone call that the City's project was moving forward.

13. On September 25, 2009, the Department received the Intended Use Application for a DWSRF loan to install emergency power. In a November 3, 2009 telephone call, the Department's engineer discussed the status of the City's project with Ed Slattery, Stanley Consultants. The Department's engineer informed the consultant of the schedule for DWSRF projects and the fact that the City had already missed the design and bid deadline specified in the compliance schedule. Mr. Slattery indicated that the City might not be able to meet the installation deadline of March 31, 2010 because of the DWSRF timeline.

14. On November 16, 2009, the Department received a letter from Chad Schaeffer, City Engineer, requesting an extension for the emergency power project due to the City's application for DWSRF funds for the project and delays associated with that process. The City's letter requested an extension to July 30, 2010. The Department did not grant this request.

15. On April 13, 2010, the Department's Water Supply Operation Section issued an NOV for a compliance schedule violation. The NOV was issued for failure to construct an emergency power source for wells nos. 14 and 17 and the John W. Pray Water Treatment plant by March 31,

**IOWA DEPARTMENT OF NATURAL RESOURCES
ADMINISTRATIVE ORDER
CITY OF FORT DODGE**

2010, as required by the appendix to the revised water supply operation permit issued on September 10, 2008.

16. On May 10, 2010, David Fiercke, the City Administrator, contacted the Department's engineer to ask what the repercussions would be if the City did not move forward with the project to install emergency power. The City Administrator stated that the reason for not moving forward was that the City did not want to raise the water rates for existing customers.

17. To date, the City has not provided for dedicated standby power to pump and treat water to meet average day demand.

IV. CONCLUSIONS OF LAW

1. Iowa Code section 455B.172 makes this Department the agency of the state to conduct the public water supply program. Iowa Code section 455B.171 defines a public water supply system as a system for the provision of piped water for human consumption, if the system has at least fifteen service connections or regularly serves at least twenty-five individuals. Iowa Code sections 455B.173(3), (5), and (6) authorize the Environmental Protection Commission (Commission) to promulgate rules relating to the operation of public water supply systems and to adopt drinking water standards to assure compliance with federal standards adopted pursuant to the federal Safe Drinking Water Act. The Commission has the authority to adopt rules relating to monitoring, record keeping, and reporting requirements for any public water supply. The Commission has adopted such rules at 567 IAC chapters 40- 43.

2. Rule 567 IAC 40.2(455B), further defines public water supply by defining "community water system" as a public water supply which has at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents, consistent with federal regulations. This public water supply is classified as a community water system.

3. Subrule 43.2(2) requires that no person shall operate any public water supply system or part thereof without, or contrary to any condition of, an operation permit issued by the Director. Subrule 43.2(5), subparagraph "a," states that operation permits may contain such conditions as are deemed necessary by the Director to ensure compliance with all applicable rules of the Department, to ensure that the public water supply system is properly maintained, to ensure that potential hazards to the water consumer are eliminated promptly, and to ensure that the requirements of the Safe Drinking Water Act are met. Subrule 43.2(5), subparagraph "b," states that where one or more MCLs, treatment techniques, designated health advisories, or action levels cannot be met immediately, a compliance schedule for achieving compliance with standards may be made a condition of the permit. The City violated these subrules by its failure to comply with the compliance schedules in its water supply operation permit.

4. Subrule 43.3(1) discusses the design standards for public water supplies. This subrule provides as follows:

Any public water supply that does not meet the drinking water standards contained in 567—Chapters 41 and 43 shall make the alterations in accordance with the standards for

**IOWA DEPARTMENT OF NATURAL RESOURCES
ADMINISTRATIVE ORDER
CITY OF FORT DODGE**

construction contained in 43.3(2) necessary to comply with the drinking water standards unless the public water supply has been granted a variance from a maximum contaminant level or treatment technique as a provision of its operation permit pursuant to 43.2(455B), provided that the public water supply meets the schedule established pursuant to 43.2(455B). Any public water supply that, in the opinion of the director, contains a potential hazard shall make the alterations in accordance with the standards for construction contained in this rule necessary to eliminate or minimize that hazard. A system that is not operating within the design standards may be required by the department via a compliance schedule to upgrade the deficient areas of the system before a construction permit will be issued for any work in the system that does not address the current deficiencies.

5. Department subrule 567 IAC 43.3(2)“a” discusses standards for public water supply construction. This subrule provides in part:

The standards for a project are the Ten States Standards and the American Water Works Association (AWWA) Standards as adopted through 2003 and 43.3(7) to 43.3(9). To the extent of any conflict between the Ten States Standards and the American Water Works Association Standards and 43.3(7) to 43.3(9), the Ten States Standards, 43.3(2), and 43.3(7) to 43.3(9) shall prevail.

6. The Recommended Standards for Water Works, Standard 2.6, provides the requirements for dedicated standby power. This standard provides that dedicated standby power shall be required by the reviewing authority so that water may be treated and/or pumped to the distribution system during power outages to meet the average day demand. Alternatives to dedicated standby power may be considered by the reviewing authority with proper justification.

7. During the 2003 review of construction permitting documents for a project to be constructed with DWSRF monies, the City was asked to document a source of dedicated standby power as required by the Department’s design standards and Department rules. The City’s engineering consultants stated that auxiliary power was available to the treatment plant from two independent power sources. This was verified by a representative from MidAmerican Energy. The final Department inspection of the DWSRF project was conducted in May 2007. During the inspection, City treatment plant personnel indicated that while two independent sources of power were available, the plant electrical configuration could not utilize power from the alternative source.

8. Subrule 567 IAC 43.8(6)“a”(1) states that systems applying for DWSRF loan funds must be viable, or loan funds must be used to assist the system in attaining viable status. If a system making a loan application is found to be not viable, and loan funds will not be sufficient or available to ensure viability, then the situation must be corrected to the Department’s satisfaction prior to qualification to apply for loan funds. This system was considered viable at the time of loan application due to the system’s statement that power was available to the plant from two independent sources. During the May 2007 inspection, some four years after the review of the project was initiated, the Department learned that although two independent power sources were

**IOWA DEPARTMENT OF NATURAL RESOURCES
ADMINISTRATIVE ORDER
CITY OF FORT DODGE**

available, the plant was not able to function using the backup power supply. As a result, water could not be pumped and treated in the event of a power outage as the standards require.

V. ORDER

THEREFORE, the Department orders the City to comply with the following provisions in order to abate and redress violations of Department rules and the facility's public water supply operation permit:

1. Complete construction of the project to provide a backup power supply for wells to meet 10 MGD as the current average daily demand by September 30, 2013.
2. Complete construction of an operational emergency backup power source for the John W. Pray water treatment plant, including the ground storage tank at the water treatment plant and the booster pump serving the tower west of the water treatment plant to meet 10 MGD as the current average daily demand by September 30, 2013.
3. Pay an administrative penalty of \$10,000.00 within 60 days of receipt of the Order signed by the Director.

VI. PENALTY

1. Iowa Code section 455B.191 authorizes the assessment of civil penalties of up to \$5,000.00 per day of violation for the violations involved in this matter.
2. Iowa Code section 455B.109 authorizes the Commission to establish by rule a schedule of civil penalties up to \$10,000.00 that may be assessed administratively. The Commission has adopted this schedule with procedures and criteria for assessment of penalties in 567 IAC chapter 10. Pursuant to this chapter, the Department has determined that the most effective and efficient means of addressing the above-cited violations is the issuance of an Order with an administrative penalty. The administrative penalty assessed by this Order is determined as follows:

a. Economic Benefit. There have been cost savings to the City. The City delayed construction of the project for the backup power supply for wells nos. 14 and 17. The City also delayed installation of an operational emergency backup power source for the John W. Pray Water Treatment plant, including the ground storage tank at the water treatment plant and the booster pump serving the tower west of the water treatment plant to meet average day demand.

The City has saved construction costs due to the failure to complete the projects to add back-up power supplies. While costs will be incurred by the City when the projects for supplying back-up power supplies are constructed, the City has delayed these costs for a considerable time period. The amount of \$4,000.00 is assessed for this factor.

**IOWA DEPARTMENT OF NATURAL RESOURCES
ADMINISTRATIVE ORDER
CITY OF FORT DODGE**

b. Gravity of the Violation. One of the factors to be considered in determining the gravity of a violation is the amount of penalty authorized by the Iowa Code for the type of violation. As indicated above, substantial civil penalties are authorized by statute. Despite the high penalties authorized, the Department has decided to handle the violations administratively at this time, as the most equitable and efficient means of resolving the matter.

The City has put its customers and the public water supply at risk by not providing for dedicated standby power to pump and treat water to meet average day demand during power outages. During an inspection on May 14, 2007 of the DWSRF project, the Department was informed by the City's water production manager that the water plant could not run on the alternative power source because the service was not the right voltage. In the case of a significant power outage, the City could be left without drinking water or water for fire protection. The amount of \$3,000.00 is assessed for this factor.

c. Culpability. The Department's engineer would have required emergency power as part of the original project approved in 2004 if the City's consultants had provided adequate information concerning the availability of auxiliary power from two independent sources during the review process. The amount of \$3,000.00 is assessed for this factor.

VII. APPEAL RIGHTS

Pursuant to Iowa Code section 455B.175(1), and 561 IAC 7.4(1), as adopted by reference by 567 IAC chapter 7, a written notice of appeal to the Commission may be filed within 30 days of receipt of this Order. The notice of appeal should be filed with the Director of the Department, and must identify the specific portion or portions of this Order being appealed and include a short and plain statement of the reasons for appeal. A contested case hearing will then be commenced pursuant to Iowa Code chapter 17A and 561 IAC chapter 7.

VIII. NONCOMPLIANCE

Compliance with Section V. of this Order constitutes full satisfaction of all requirements pertaining to the violations described in this Order. Failure to comply with this Order may result in the imposition of administrative penalties pursuant to an administrative order or referral to the Attorney General to obtain injunctive relief and civil penalties pursuant to Iowa Code section 455B.191.

IOWA DEPARTMENT OF NATURAL RESOURCES
ADMINISTRATIVE ORDER
CITY OF FORT DODGE

Chuck Gipp
CHUCK GIPP, DIRECTOR
IOWA DEPARTMENT OF NATURAL RESOURCES

Dated this 28th day of

December, 2012

City of Fort Dodge - Water Supply Facility No. 9433050, Jennifer Bunton P.E.- Water Supply Engineering Section, Anne Pham & James Warren- Water Supply Operations Section, David Hopper- Field Office No. 2, Diana Hansen- Legal Services Bureau, IL.B.2.b.